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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/759,339	01/16/2001	Minoru Miyatake	Q62691	2152

7590

01/15/2003

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EXAMINER

AKKAPEDDI, PRASAD R

ART UNIT

PAPER NUMBER

2871

DATE MAILED: 01/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/759,339

Applicant(s)

MIYATAKE ET AL.

Examiner

Prasad R Akkapeddi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.

- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the liquid crystal display must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
3. The abstract of the disclosure is objected to because: It contains more than 150 words. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention: On Page 34, lines 1-2, the claim recites "the delta n -direction length of from 0.5 to 50 micrometers". The index of refraction or the change in index of refraction is a constant number are is not measured in micrometers.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-2, 6 -10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shirasaki et al. (Shirasaki) (U.S. Patent No. 6,025,894) in view of Allen et al. (Allen) (U.S. Patent No. 6,111,696).

a. As to claim 1: Shirasaki discloses an organic electroluminescent device (Fig. 35) comprising an organic electroluminescent element (114) and a light scattering film (120). Shirasaki also discloses that the light produced by the organic electroluminescent element (114) being emitted from the device through the light scattering film (120). Shiraski discloses a light scattering film of a different design and does not disclose a polarizing light scattering film. However, Allen discloses a polarizing light scatter plate which comprises a light transmitting resin (Col. 5, lines 5-21) and dispersedly contained therein another resin and the refractive index between the two resins in two directions is disclosed and they satisfy the cited limitations in the claim. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to adapt

the polarized-light scattering film disclosed by Allen to the organic electroluminescent device disclosed by Shirasaki to achieve desirable degrees of diffuse and specular reflection and transmission, wherein the optical material is stable with respect to stress, strain, temperature differences, electric and magnetic fields and the optical material has low iridescence.

b. As to claims 2, 6 -10: Shirasaki discloses that the scattering film (120) is superposed on the electrode substrate (110) (Fig. 35), the polarizing surface light source comprising the organic electroluminescent device which has an illuminating planar surface and emits a polarized light (Fig. 35) and discloses a liquid-crystal display which comprises the polarizing surface light source (101) and a liquid-crystal cell (140) disposed on the light emission side of the light source (101). Allen discloses birefringent polymer diffusion films (Col. 9, line 52-53) and the retardation is a function of index of refraction of the birefringent material. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to adapt the polarized-light scattering film disclosed by Allen to the organic electroluminescent device disclosed by Shirasaki to achieve desirable degrees of diffuse and specular reflection and transmission, wherein the optical material is stable with respect to stress, strain, temperature differences, electric and magnetic fields and the optical material has low iridescence.

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8. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shirasaki and Allen as applied to claim 1 above, and further in view of Pokorny et al. (Pokorny) (U.S. Patent No. 6,461,775).

c. Allen discloses that the film is out of thermoplastic resin (Col. 14, line 32), but does not disclose the glass transition temperatures of the film. However, Pokorny discloses thermoplastic material having various glass transition temperatures (Col. 8, lines 58-67). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to adapt the type of film disclosed by Pokorny to the display device of Shirasaki and Allen since this reference is only meant to point out that the thermoplastic materials have high glass transition temperatures that could be applicable in liquid crystal display applications.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prasad R Akkapeddi whose telephone number is 703-305-4767. The examiner can normally be reached on 7:00AM to 5:30PM M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H Kim can be reached on 703-305-3492. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0530.

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RA

December 17, 2002

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